CLAIMS

[1] A radiation curable resin composition for a lens sheet, characterized by comprising: an epoxy (meth)acrylate (a); a bifunctional (meth)acrylate (b1) expressed by the general formula (1) described below,

(2) described below,

(wherein, R1, R2 denote either hydrogen atoms or a methyl group, and a mean value of m1+m2 is 1 to 5); a bifunctional (meth)acrylate (b2) expressed by the general formula

(wherein, R3, R4 denote either hydrogen atoms or a methyl group, and a mean value of n1+n2 is 8 to 20);

- a bifunctional (meth)acrylate (b3) obtained from (meth)acrylic acid and an aliphatic dihydric alcohol having an oxyalkylene structure; a monofunctional (meth)acrylate (c); and a thermoplastic resin (d).
- [2] The radiation curable resin composition for the lens sheet according to claim 1, wherein a mass ratio (b1)/(b2) of the bifunctional (meth)acrylate (b1) and the bifunctional (meth)acrylate (b2) ranges from 20/80 to 80/20, and a mass ratio of (b3)/[(b1)+(b2)] of the bifunctional (meth)acrylate (b3) to the sum of the bifunctional (meth)acrylate (b1) and the bifunctional (meth)acrylate (b2) ranges from 15/85 to 70/30.
- [3] The radiation curable resin composition for the lens sheet according to claim 2, wherein the bifunctional (meth)acrylate (b3) is a bifunctional (meth)acrylate (b31) obtained from (meth)acrylic acid

and an aliphatic dihydric alcohol having an oxypropylene structure.

- [4] The radiation curable resin composition for the lens sheet according to claim 3, wherein the thermoplastic resins (d) is a polyurethane-type resin having a glass transition temperature ranging from -70°C to 0°C.
- [5] The radiation curable resin composition for the lens sheet according to claim 4, wherein the epoxy (meth)acrylate (a) is a (meth)acrylate of a bisphenol-type epoxy resin, and the monofunctional (meth)acrylate (c) is a monofunctional (meth)acrylate (c1) having a cyclic structure.
- The radiation curable resin composition for the lens sheet according to any one of claims 1 to 5, wherein in 100 parts by mass of the sum of the epoxy (meth)acrylate (a), the bifunctional (meth)acrylate (b1), the bifunctional (meth)acrylate (b2), the bifunctional (meth)acrylate (b3), the monofunctional (meth)acrylate (c), and thermoplastic resin (d), the content of the epoxy (meth)acrylate (a) ranges from 20 to 70 parts by mass, the content of the sum of the bifunctional (meth)acrylates (b1), (b2) and (b3) ranges from 5 to 60 parts by mass, the content of the monofunctional (meth)acrylate (c) ranges from 5 to 40 parts by mass, and the content of the thermoplastic resin (d) ranges from 0.5 to 10 parts by mass.
- [7] The radiation curable resin composition for the lens sheet according to any one of claims 1 to 5, further comprising a multifunctional(meth)acrylate (e) as trifunctional or more than trifunctional.
- [8] The radiation curable resin composition for the lens sheet according to claim 7, wherein the multifunctional (meth)acrylate (e) as trifunctional or more than trifunctional is a (meth)acrylate (e1) of aliphatic polyhydric alcohol having an oxypropylene structure.

[9] The radiation curable resin composition for the lens sheet according to claim 7, wherein in 100 parts by mass of the sum of the epoxy (meth)acrylate (a), the bifunctional (meth)acrylate (b1), the bifunctional (meth)acrylate (b2), the bifunctional (meth)acrylate (b3), the monofunctional (meth)acrylate (c), thermoplastic resin (d) and the multifunctional (meth)acrylate (e)as trifunctional or more than trifunctional, the content of the epoxy (meth)acrylate (a) ranges from 20 to 70 parts by mass, the content of the sum of the bifunctional (meth)acrylates (b1), (b2) and (b3) ranges from 5 to 60 parts by mass, the content of the monofunctional (meth)acrylate (c) ranges from 5 to 40 parts by mass, the content of the thermoplastic resin (d) ranges from 0.5 to 10 parts by mass, and the content of the multifunctional (meth)acrylate (e) as trifunctional or more than trifunctional ranges from 1 to 10 parts by mass.

- [10] A lens sheet, characterized in that a lens-shaped resin layer formed by curing the radiation curable resin composition for the lens sheet according to any one of claims 1 to 9 is provided on a plastic substrate.
- [11] The lens sheet according to claim 10, wherein the lens sheet is a Fresnel lens sheet.